



GOVERNO  
DOS AÇORES



UNIÃO EUROPEIA

Fundo Europeu de  
Desenvolvimento Regional

**DESIGNAÇÃO DO PROJETO:** Impacts of Marine Litter in the Azores (LIXAZ)

**CÓDIGO DO PROJETO:** AÇORES-01-0145-FEDER-000053

**OBJETIVO PRINCIPAL:** Aumentar a produção científica de qualidade e orientada para a especialização inteligente

**ENTIDADE BENEFICIÁRIA:** IMAR (Instituto do mar)

**CUSTO TOTAL ELEGÍVEL:** 145.542,04€

**APOIO FINANCEIRO DA UNIÃO EUROPEIA:** 123.710,73€

**DESCRIÇÃO:** The objective of this research project is to assess the risks and impact of marine litter in the Azores. Specifically, we aim to quantify the threats for local marine fauna by monitoring plastic ingestion by different species, and also by characterizing the contaminants and metals that are associated with plastic items and end up in the food web. The project also intends to develop an interaction index between floating marine litter and turtles. Finally, we will evaluate the direct economic costs of marine litter for the region.

**RESULTADOS:** Results were presented in scientific meetings, general public events along with international symposia, including a total of 17 presentations done by different team members. Results were also included in the following publications, all acknowledging the project:

Pereira, J.M., Rodríguez Y., Lewis C., Porter, A., Pham, C.K. In press. Microplastic ingestion in open-ocean and deep-sea fishes of the Azores archipelago, North-East Atlantic. *Environmental Pollution*.

Martins I., Rodríguez Y., Pham, C.K. 2020. Trace elements in microplastics stranded on beaches of remote islands in the NE Atlantic. *Marine Pollution Bulletin*. 111270

Herrera, A., E. Raymond, I. Martínez, S. Álvarez, J. Canning-Clode, I. Gestoso, C.K. Pham, N. Ríos, Y. Rodríguez, M. Gómez. 2020. First evaluation of neustonic microplastics in the Macaronesian region, NE Atlantic. *Marine Pollution Bulletin*. 110999.

Pham, C.K., Pereira, J., Frias, J., Carriço, R., Rios, N., Juliano, M., Rodríguez, Y. 2020. Beaches of the Azores archipelago as transitory repositories for small plastic fragments floating in the North-East Atlantic. *Environmental Pollution*. 263:114494.

Chambault, P., Vandeperre, F., Machete, M., Lagoa, J. C., Pham, C. K. 2018. Distribution and composition of floating macro litter off the Azores archipelago and Madeira (NE Atlantic) using opportunistic surveys. *Marine environmental research*. 141: 225-232.

Ríos, N., Frias, J. P., Rodríguez, Y., Carriço, R., Garcia, S. M., Juliano, M., Pham, C. K. 2018. Spatio-temporal variability of beached macro-litter on remote islands of the North. *Marine Pollution Bulletin*. 133:304-311.

Pham C.K., Rodríguez Y, Dauphin A, Carriço R, Frias J.P.G.L, Vandeperre F., Otero V., Santos M.R., Martins H.R., Bolten A.B., Bjørndal K.A.. 2017. Plastic ingestion in oceanic-stage loggerhead sea turtles (*Caretta caretta*) off North Atlantic subtropical gyre. *Marine Pollution Bulletin*. 121:222-229.